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DANCING WITH THE WIND: AN EDUCATIONAL ENVIRONMENT USING PATTERNED ENERGY SIGNALS

by Elizabeth Kuder, MFA and Davis Fleming, MA

Professional members Elizabeth Kuder and Davis Fleming are co-coordinators of the Sound/Music/Movement Program. Elizabeth, a special education teacher with credentials in art, administration, and working with the severely handicapped, is the founder of the program. She is a conceptual artist with a master of fine arts from the University of California at Los Angeles and studied clinical psychology at Antioch University, focusing on the nature of creativity.

Davis is a licensed psychotherapist in private practice and currently teaches students with visual impairments and multiple disabilities. Both Elizabeth and Davis utilize the Sound/Music/Movement Program to research, develop, and implement an arts-based curriculum for students with severe disabilities. In this paper based on their presentation at the 2006 Professional Seminar, they share details of introducing their program into the Los Angeles Unified School District and the results of incorporating pink noise and Hemi-Sync® as part of its sound component.

Davis and I have been collaborating on developing curricula for people with multiple severe disabilities in a special education center in the Los Angeles Unified School District public school system. The students in our school, which is completely for students with disabilities, range in age from eleven through twenty-two years. Each of us has a classroom of students with multiple severe disabilities and blindness. We do the Sound/Music/Movement work in addition to our full-time classroom positions. The school district will not fund programs like this, so our activities are basically an adaptation under that umbrella.

Davis has eleven students in his classroom. They are all completely blind except for one with very low vision. Some have cognitive disabilities and autism. There are a variety of physical health issues. A couple of students are fed with gastrointestinal tubes because they can't eat through their mouths for various reasons. Another classroom has students with very severe autism and these students are violent. In the hall they bang on the walls and kick things around and have attacked a number of staff members. Some have other physical disabilities, cognitive disabilities, and Down's syndrome. Our goal is to discover who these students are as learners, how they learn, what we can learn from them, and what their purpose is on this planet. It seems that as we neglect to answer these questions and try to force them into normalcy, the more of them there are. Many of them live in institutions and cannot be mainstreamed, so the district had to convert a number of schools into total special education centers.

Federal law—the Individuals with Disabilities Education Act (IDEA)—required that these students be placed in classrooms, but without mandating any programs for them. What they got was very piecemeal and nonsequential, and their teachers tended to be quite isolated and to be blamed for any problems. The Sound/Music/Movement Program attempts to alleviate some of the pressure on the staff by coming up with a sequential program that takes the students into a healing and developmental environment.

That particular learning environment is called Dancing with the Wind and involved several classrooms in our school. Each classroom had a forty-five minute session—including the actual session and an assessment afterward—once a week for twelve weeks. A BP A+ for Energy Program teaching grant from British Petroleum enabled us to do this. Monroe Products® provided a pink noise CD and also *Surf with Hemi-Sync®*. Pink noise was used at the beginning of the environment to calm the students and *Surf* was introduced at the end of the environment and played throughout the assessment process.

The learning environment is made with tent posts and collapsible tents that can be set up in any classroom. The structure ended up having a pyramid shape. At the point of the tent is a coil to direct energies. The white Pellon® side sheets roll up when we want to use the rest of the classroom. We constructed a lot of things out of cheaper materials. To bring in something that is different, you can hide it or you can make it so weird that nobody knows what they're looking at. The patterned energy signals include wind from fans, colored lights, and also directional signals from gongs. The idea was to cause internal and external movement so the students could get a sense of their location. In order to learn you must have internal references. In this environment they learn a right, a left, a forward, and a back movement to establish where they are in space.

The arts are the basis for the Sound/Music/Movement curriculum. We are interested in the process that artists use to make what they create. They have no difficulty with ambiguity. Artists connect with intuitive knowledge that has been shown to have a basis in mathematics and science. They bring a way of knowing that goes beyond the intellect, and therefore, we think it has application to these students. This is an exploration to really understand these students, to get out of the caretaking mode, to understand their purpose and how we can learn from them and they from us in a different way.

How can we look at them differently? Since people are not solely material, maybe one way would be to work with the nonmaterial or the ethereal body and see if that learning transfers back into the material body. This viewpoint redefines learning as connecting with larger patterns, patterns that are common to a lot of different cultures. We have found a number of those patterns and are using them in the environment.

Besides pink noise and *Surf*, we also played *Cloudscapes* and *The Visit* in Davis's classroom. Since Davis had to have his classroom all day long, for a couple of sessions his students needed to sit outside the environment. Usually they are very noisy and self-abusive. But because they listened to Hemi-Sync every day in the environment, they were so quiet—even outside of it—that people would say, "Davis, your class is so quiet. What happened?" He had worried about how to contain his own classroom while we were running other classrooms in the environment. There were really no problems at all.

We had a written script and lesson plans so the teachers knew in advance how the experience would unfold. All of the signals in the environment were hand-timed with a stopwatch. Davis and I had to run everything during the space. As the students come in, the fans and gongs are in the foreground. A public address system delivers the Hemi-Sync so it vibrates the room. The binaural wave could actually be felt. These students cannot wear headphones. A lot of them have very severe autism or aberrations of their heads, which headphones will not fit. There was a speaker on one side and a speaker on the other side. Through the grant we were able to pay a sound consultant to set things up correctly. Everything was controlled from a simple

device made out of surge protectors and plugs on a table. We're interested in being able to set up classroom environments that can stay there and that can be altered easily to allow regular classroom procedures to go on. The learning environment is overlaid on an existing classroom environment and is referred to as a classroom overlay.

The human being is part of the spatial system, and that is a good depiction of how we see our students, as a part of an energy system. Educators always talk about developing people to their fullest potential. With these students we really don't know their limits or their capabilities. So we started working with more general ideas that everyone would be interested in and everyone could do. As the students are coming into the space we have the pink noise playing in the room. Long noisy bus rides to school, chaotic schedules, loud random noises, busy hallways, interruptions, behavior problems, multitasking and health issues can make students and staff unreceptive to the learning experience. Listening to pink noise as they enter and settle into the space allows them to move quickly into a relaxed, open state where they are calm and focused.

Both the staff and the students participate in the learning environment in an attempt to create a different way of communicating with each other. Because these students are unable to individuate, we believe they remain much more connected at a communal level. Perhaps telepathic connections and subtle energies already exist between them—to be brought to the foreground and used as educational tools. With clear instructions on what to do in the space, maybe the staff can communicate skills through these invisible force lines. The staff was directed to come in, sit down behind the students, and pay attention to anything that happened in the space, to the students and to themselves.

These students are not involved in any sort of movement activities other than some very intrusive physical therapy, which really hasn't resulted in much improvement. Ivar Hagendoorn, researcher on neuroscience at the University of Southern California, has noted, however, "Intuitively, it makes sense that the same motor areas are activated regardless of whether you imagine or actually perform a movement. One way of emphasizing movement is to build up and play with the brain's natural tendency to form an expectation of what comes next." In trying to determine what is causing learning, the student needs to develop a sense of anticipation. It should be possible to build up anticipation by using a signal that repeats itself. In the *Dancing with the Wind* environment, the signal was the gong. The pink noise stopped as we started the environment, the gong was sounded, the fans were turned on, and then the yellow lights came on. The fans, the gongs, and the lights were all on the left because it's a right reference movement. The wind, the sound vibrations, and the lights are all moving toward the right, and yellow light is the signal for right movement. There were interesting responses; heads were turning right.

When we move into a pink signal, that's a movement to the left, so all the lights, fans, and gongs are on the right side of the environment. The set-up for front movement places the gongs and the fans in the back. The energies coming from the back to the front cause a feeling of moving toward the front or actual movement toward the front. We began to see body movement in the direction that the energy was going. The front movement is referenced with a blue light signal.

The setup for back movement has all of the technology in front of the students and is referenced by a green light. Once the right, left, back, and front movements were established, we started patterning the light signals in order to create a combination of movements. We alternated a pink and a green light to pattern diagonal movement: the pink, then the green, and so on. Some of the students with autism were able to do the diagonal movement.

One classroom has eight students with severe autism and behavior problems, two one-on-one assistants, a classroom assistant, and a teacher. Students from that classroom sat in the space for forty-five minutes alone. No one was controlling their behavior, so something was going on there. During the learning sequence of the environment, you could feel the movement right across the front line of students. Several students appeared to be pulled in the direction of up. We were playing a certain number of gong sounds, the lights were on a certain amount of time, and the fans were on a certain amount of time—sometimes in unison, sometimes separately. Davis and I had a script and were running the environment. So it wasn't just random. We started to notice a lot of pulls in different directions, and sometimes when we would go into the space, it would seem bigger than at other times.

We made DVD recordings of all the sessions for later study. They enable us to look for subtle indicators that similar changes are occurring in more than one student—something that can be detected and used to detect learning. Most of the students either don't talk or are very low verbal. They only make random noises or repeat empty words.

During the assessment the staff remained in the space with the students. To elicit their pure experiences, we told the staff only one thing before the *Dancing with the Wind* environment started: a physicist had proved that particles that oscillate separately from each other eventually oscillate at the same rate. Moving into the assessment phase of the environment, the colored lights and the fans are turned off. *Surf* is playing and the sounds are getting louder. The environment is dark, then we switch on the room lights and the environment turns white. We start curling up the front white Pellon screens. All of the staff members are given clipboards and asked to write down their observations on two students. As the discussion starts, *Surf with Hemi-Sync* continues to play. At the beginning of the environment, pink noise diffuses and opens the space. At the end we want to begin shutting it down and engaging other aspects of knowing, such as the intellect. We're trying to get communication out of both

the students and the staff. The staff was very, very eager to start talking. The students sat alone in the space with their attention on Davis.

Some staff members said that they knew what a student felt. Some reported seeing energies around other staff members. Others shared complex descriptions about metaphysical occurrences in the space, without any input from us. Students struggled to turn around and laugh and acknowledge that what staff members had said about them was true. When we rolled up the Pellon sides for the assessment, a shape had formed in the space. There was a density change within it. Davis and I used that perception as a way of knowing when it was time to roll up the sides. After about the third session in the environment, the staff started saying, “There’s a shape in the space, and today it seems bigger,” or “today it seems smaller.”

People began to notice a particular light around things. An assistant admitted that people had said they had seen such a light around him. He also commented on how his perception of the students was changing. It was shocking to learn he had used the word “vegetable” before. Now he said, “I really see that they do have something going on inside of them.” Having the staff participate in something that was energizing made a big difference. They were used to working with students who attacked them and made odd sounds all day. The students exposed to *Dancing with the Wind* seemed so calm; staff members opened their perception to them because they didn’t feel threatened anymore. Instead, they felt curious.

Some whole classrooms could not come into the environments. Teachers selected certain students. When those particular students went back into their classrooms, however, they made it seem calmer—even with the presence of students who had not been in the environment. So there appeared to be a carryover effect. As we moved through the assessment, the students started to get more agitated—anticipating the end of the environment—and a number of them did not want to leave the space. They always wanted to come to the environment. We expected at some point to have behavior problems but that never happened.

Davis talked with his students during the assessment phase about which direction the energy was going, and one little girl tried to explain it by using movement. She self-mutilates and has very severe autism, blindness, a cleft palate, and some cerebral palsy. She’s on heavy-duty medications for severe behavior problems. The parents can’t handle her at home. A classroom of less dependent students could talk somewhat about the experience and try to indicate where the energy was coming from. One student had suffered brain damage. Before that she actually had all her capacities. After being in the environment for three weeks she suddenly regained her ability to write. Unfortunately, two weeks after the environment ended, she lost that ability again. She was extremely interested in the space and was always asking her teacher, “Can we go back? Can we go back?” She also asked for her own copy of the music. We ended up giving every classroom a *Surf* CD.

Since we have students with disabilities who can express some things, we think it is better to compare their experience with the experience of other students with disabilities rather than relying completely on staff analysis. One student couldn't move at all but used his eyes to participate in a discussion when the teacher was talking about him. During the session that student had a nice integrated skin color, although he was very red looking when he came into the space.

We're working with being able to say, "We don't know, but something is going on here. If we can keep working with it, eventually we'll know what it is." The staff shared the students' experiences. They were actually involved in something that was meaningful to them and the students.

When a staff member talked about a student named Smadi, she became involved in the conversation. Smadi started laughing, making noises, and moving her head in the direction of the speaker, confirming the truth of what was being said. She didn't always turn to people when they talked about her. She can't use her arms at all because her hands attempt to contract. In the space, she tended to open up and her arms sort of relaxed on the wheelchair. She stopped drooling. Her glasses frequently fell off but while there she was able to keep them on. Her breathing device could be removed when she came into the environment because she also started breathing. The staff member, in assessing her, looked at her and involved her.

One student used a communication notebook to express ideas. We asked her about the colors in the space, and she pointed in her notebook to the color she saw. This student had been in an accident. She was "normal" and had been a dancer. Her case was very sad. Most of the students in the school were born with their disabilities. One had to wonder what was going on in that student's brain and how connected she was in her body. She was very eager to come into the space.

By working in this way in a bureaucracy, we're going completely against the idea of what these students can and can't do and the nature of the staff's role, and we are also bringing in ideas that are metaphysical, spiritual, and somewhat edgy for a very linear environment. At first, I was really afraid to bring a class with severe behavior problems into the *Dancing with the Wind* environment. But a lot of this work is directed by intuition now, and that class was pinpointed by intuition as having to come into the space.

Davis noted that intention is essential. Author Michael Tolkin said: “There are probably poems you go back to, even though you don’t fully understand them. The enigma of them works because there’s a form and structure that the writer works from. The actual words are less important than the structure. Lennon and McCartney worked that way too: *Scrambled Eggs* became *Yesterday*, you know. It was the melody first, then they found the words for it. And the rhythm is really structure. And that structure is the structure of the universe.” With this work, we are going back behind the words into the structure that formed them and connecting the students and the staff to it. In this photo Smadi is with her health care assistant and her little breathing tube is hanging off of the side of the wheelchair—not in her nose—and the assistant is saying, “Smadi and I are connected. Smadi really can understand.”

In the words of writer Shel Silverstein:

Once I spoke the language of the flowers,
Once I understood each word the caterpillar said,
Once I smiled in secret at the gossip of the starlings,
And shared a conversation with the housefly in my bed.
Once I heard and answered all the questions of the crickets,
And joined the crying of each falling dying flake of snow,
Once I spoke the language of the flowers...
How did it go? How did it go?

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